Amendments to the Claims

Claims 1-20 (cancelled)

Claim 21 (currently amended): An isolated polypeptide produced by ~~the~~a method ~~of claim 20.~~ comprising: culturing a host cell, or the progeny thereof, transformed to contain the nucleic acid molecule of any one of (i) the nucleotide sequence of SEQ ID NO:1, (ii) the nucleotide sequence of SEQ ID NO:2, (iii) a nucleotide sequence that is a degenerate variant of the nucleotide sequence of SEQ ID NO:2, (iv) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3, (v) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3 with conservative amino acid substitutions; (vi) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3 with moderately conservative amino acid substitutions, or (vii) a nucleotide sequence that is the complement of the nucleotide sequence of any one of (i) - (vi), under conditions in which the protein encoded by said nucleic acid molecule is expressed.

Claim 22 (original): An isolated polypeptide selected from the group consisting of: (a) an isolated polypeptide comprising the amino acid sequence of SEQ ID NO:3; (b) an isolated polypeptide comprising a fragment of at least 8 amino acids of SEQ ID NO: 3; (c) an isolated polypeptide according to (a) or (b) in which at least 95% of deviations from the sequence of (a) or (b) are conservative substitutions; and (d) an isolated polypeptide having at least 65% amino acid sequence identity to the isolated polypeptide of (a) or (b).

Claim 23 (original): An isolated antibody or antigen-binding fragment or derivative thereof the binding of which can be competitively inhibited by a polypeptide of claims 22.

Claim 24 (original): A method of identifying binding partners for a polypeptide according to claim 22, the method comprising:

contacting said polypeptide to a potential binding partner; and

determining if the potential binding partner binds to said polypeptide.

Claim 25 (original): The method of claim 24, wherein said contacting is performed in vivo.

Claim 26 (currently amended): A method of modulating the expression of a nucleic acid ~~according to claim 1~~, ~~the method~~ comprising:

administering an effective amount of an agent which changes the expression of a nucleic acid ~~according to claim 1.~~including: (i) the nucleotide sequence of SEQ ID NO:1, (ii) the nucleotide sequence of SEQ ID NO:2, (iii) a nucleotide sequence that is a degenerate variant of the nucleotide sequence of SEQ ID NO:2, (iv) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3, (v) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3 with conservative amino acid substitutions; (vi) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3 with moderately

conservative amino acid substitutions, or (vii) a nucleotide sequence that is the complement of the nucleotide sequence of any one of (i) - (vi).

Claim 27 (currently amended): A method of modulating at least one activity of a polypeptide according to claim 22, the method comprising:

administering an effective amount of an agent which modulates at least one activity of a polypeptide according to claim 21 ~~or 22~~.

Claim 28 (currently amended): A transgenic non-human animal or transgenic plant modified to contain a nucleic acid molecule of any one of ~~claims 1 – 4.~~: (i) the nucleotide sequence of SEQ ID NO:1, (ii) the nucleotide sequence of SEQ ID NO:2, (iii) a nucleotide sequence that is a degenerate variant of the nucleotide sequence of SEQ ID NO:2, (iv) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3, (v) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3 with conservative amino acid substitutions; (vi) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3 with moderately conservative amino acid substitutions, or (vii) a nucleotide sequence that is the complement of the nucleotide sequence of any one of (i) - (vi).

Claim 29 (cancelled)

Claim 30 (original): A transgenic non-human animal unable to express the endogenous orthologue of the polypeptide of claim 22.

Claim 31 (original): A method of diagnosing a disease caused by mutation in human hGDMLP-1, comprising:

detecting said mutation in a sample of nucleic acids that derives from a subject suspected to have said disease.

Claim 32 (original): A method of diagnosing or monitoring a disease caused by altered expression of human hGDMLP-1, comprising:

determining the level of expression of human hGDMLP-1 in a sample of nucleic acids or proteins that derives from a subject suspected to have said disease, alterations from a normal level of expression providing diagnostic and/or monitoring information.

Claims 33-34 (cancelled)

Claim 35 (original): A pharmaceutical composition comprising the polypeptide of claim 22 and a pharmaceutically acceptable excipient.

Claim 36 (original): A pharmaceutical composition comprising the antibody or antigen-binding fragment or derivative thereof of claim 23 and a pharmaceutically acceptable excipient.

Claim 37 (original): A purified agonist of the polypeptide of claim 22.

Claim 38 (original): A purified antagonist of the polypeptide of claim 22.

Claim 39 (original): A pharmaceutical composition comprising the agonist of claim 37.

Claim 40 (original): A pharmaceutical composition comprising the antagonist of claim 38.

Claim 41 (currently amended): A method for treating or preventing a disorder associated with decreased expression or activity of human hGDMLP-1, the method comprising administering to a subject in need of such treatment an effective amount of the pharmaceutical composition of claim 35~~any of claims 33 - 35 or 37~~.

Claim 42 (currently amended): A method for treating or preventing a disorder associated with increased expression or activity of human hGDMLP-1, the method comprising administering to a subject in need of such treatment an effective amount of the pharmaceutical composition of claim 36~~ or claim 40~~.

Claims 43-44 (cancelled)

Claim 45 (original): A diagnostic composition comprising the polypeptide of claim 22, said polypeptide being detectably labeled.

Claim 46 (original): A diagnostic composition comprising the antibody or antigen-binding fragment or derivative thereof of claim 23.

Claim 47 (original): The diagnostic composition of claim 46, wherein said antibody or antigen-binding fragment or derivative thereof is detectably labeled.

Claims 48-49 (cancelled)

Claim 50 (original): The diagnostic composition of claim 45,

wherein said composition is further suitable for in vivo administration.

Claim 51 (original): The diagnostic composition of claim 46, wherein said composition is further suitable for in vivo administration.

Claim 52 (original): The diagnostic composition of claim 47, wherein said composition is further suitable for in vivo administraiton.

Claims 53-54 (cancelled)

Claim 55 (currently amended): A method for detecting a target nucleic acid in a sample, ~~said target being a nucleic acid of any one of claims 1 – 4,~~ the method comprising:

a) hybridizing the sample with a probe comprising at least 30 contiguous nucleotides of a sequence complementary to said target nucleic acid in said sample under

hybridization conditions sufficient to permit detectable binding of said probe to said target, wherein said target being a nucleic acid of any of: (i) the nucleotide sequence of SEQ ID NO:1, (ii) the nucleotide sequence of SEQ ID NO:2, (iii) a nucleotide sequence that is a degenerate variant of the nucleotide sequence of SEQ ID NO:2, (iv) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3, (v) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3 with conservative amino acid substitutions; (vi) a nucleotide sequence that encodes a polypeptide with the amino acid sequence of SEQ ID NO:3 with moderately conservative amino acid substitutions, or (vii) a nucleotide sequence that is the complement of the nucleotide sequence of any one of (i) - (vi), and

b) detecting the presence or absence, and optionally the amount, of said binding.

Claim 56 (cancelled)

Claim 57 (original): A fusion protein, said fusion protein comprising a polypeptide of claim 22 fused to a heterologous amino acid sequence.

Claim 58 (original): The fusion protein of claim 57, wherein said heterologous amino acid sequence is a detectable moiety.

Claim 59 (original): The fusion protein of claim 58, wherein said detectable moiety is fluorescent.

Claim 60 (original): The fusion protein of claim 57, wherein said heterologous amino acid sequence is an Ig Fc region.

Claim 61 (original): A method of screening for agents that modulate the expression of human hGDMLP-1, the method comprising:

contacting a cell or tissue sample believed to express human hGDMLP-1 with a chemical or biological agent, and then

comparing the amount of human hGDMLP-1 expression with that of a control.